

## THE LIFE HISTORY OF *MEGISBA STRONGYLE NIGRA* (MISKIN) (LEPIDOPTERA: LYCAENIDAE)

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### Abstract

The immature stages of *Megisba strongyle nigra* (Miskin) from northern Queensland are described. *Mallotus paniculatus* and *M. philippensis* are recorded as host plants.

### Introduction

*Megisba strongyle nigra* (Miskin) occurs in northern Queensland from Cape York to Townsville (Common and Waterhouse 1981, Valentine and Johnson, 1982). It usually inhabits rainforest but Valentine and Johnson (1982) recorded it in dry vine scrub near the summit of Mt Stuart, Townsville. Its life history was previously unknown.

Corbet and Pendlebury (1978) proposed that the species west of Weber's Line was *M. malaya* (Horsfield) and discussion of food plants in Sri Lanka and Okinawa by Common and Waterhouse (1980) refers to this species rather than *M. strongyle*.

In April 1988, we collected eggs and larvae of *M. s. nigra* from flower buds of two species of *Mallotus* (Euphorbiaceae) on the margin of rainforest near Innisfail and in riverine rainforest remnants near Ingham. The larvae were reared to adults in Brisbane under ambient conditions.

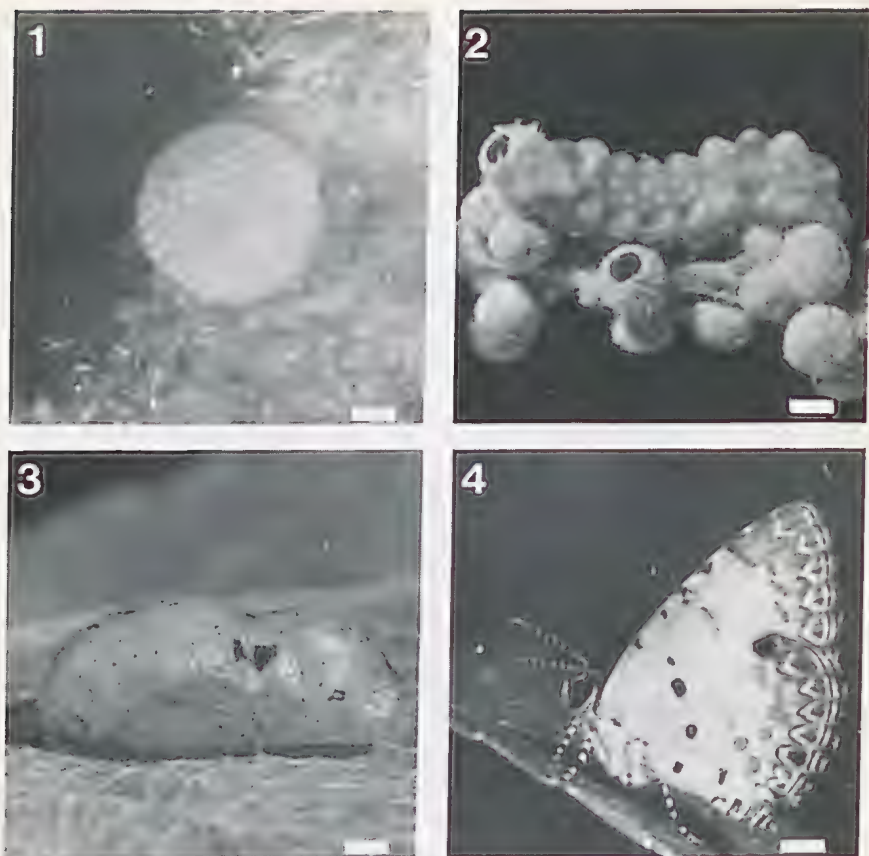
### Life History

**Food plants.** *Mallotus paniculatus* (Lam.) Muell. Arg. at Flying Fish Pt near Innisfail and *M. philippensis* (Lam.) Muell. Arg. at Gairlock Bridge near Ingham.

**Egg** (Fig. 1). Pale green, mandarin shaped, with 2 series of oblique ridges with rounded projections at their intersections. Diameter 0.45 mm.

**First instar larva.** Head black; body grey. Humped dorsally, with one long and one short pair of pale dorsal hairs per segment and short pale lateral hairs.

**Final instar larva** (Fig. 2). Head brown; body yellow with reddish brown markings. Each segment humped dorsally, bearing anterior and posterior hairs and star-shaped secondary setae, each having a filamentous central process. Mesothorax, metathorax and abdominal segment 1 with a median sulcus. Abdominal segments 7 and 8



**Figs 1-4.** Life history of *Megisba strongyle nigra* (Miskin). (1) egg, dorsal view; (2) final instar larva, lateral view; (3) pupa, lateral view; (4) adult male, underside. Figs 1,2 taken on flower buds of *M. paniculatus*. Scale bars (1) = .15 mm; (2),(3) = 1 mm; (4) = 1.5 mm.

respectively with a dorsal nectary organ and a pair of tentacular organs. Length 9 mm.

**Pupa** (Fig. 3). Pale brown with small dark brown spots and clothed in pale erect hairs. Larger brown markings mid-dorsally behind head, laterally above wing cases and in a mid-dorsal line on thorax. Attached by anal hooks and central girdle. Length 7 mm, width 3 mm.

#### Notes

Eggs are laid singly on flower buds of the food plant. Larvae feed openly on the buds, chewing large holes in them (Fig. 3) and are difficult to locate as they match closely the shape and colour of the buds. A fresh supply of *Mallotus* was unavailable and the larvae were

reared on flower buds of *Acacia leiocalyx* (Domin) Pedley (Mimosaceae). Pupae were not found in the field but reared larvae pupated on dried leaves. The larvae were not attended by ants and no parasites were observed.

Adults have been collected in almost every month of the year (Waterhouse and Lyell 1914). Females are taken more frequently than males and are mostly collected flying around blossom on rainforest margins (T.A. Lambkin, unpub. observ.) and in particular around blossoming *Mallotus* trees (P. Wilson, pers. comm.). Males frequent high trees on rainforest edges (T.A. Lambkin, unpub. observ.) and also perch in the upper branches of blossoming *Mallotus* trees. We observed that both sexes, but particularly females, have a slow fluttering flight and could easily be mistaken for small specimens of *Danis hymetus taletum* (Waterhouse and Lyell) which flies in the same habitat.

### Acknowledgements

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### References

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